

## FIRST RECORD OF A TERMITE-PARASITIZING GENUS *DICRANOPTERON* SCHMITZ FROM CHINA, WITH DESCRIPTION OF A NEW SPECIES

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**Abstract** A termite-parasitizing genus *Dicranopteron* Schmitz is reported for the first time in China. The species *D. flabellatum* is described as new to science. The new species is similar to *D. brevifurca* Disney in the appearance of wing vein, but differs from the latter in the fan-shaped hairs on dorsal surface of hind tibia and abbreviation of basal palpus segment. The fan-shaped hairs appear also in *D. palmasetorum* Disney, but the wing veins are much different in the two species.

**Key words** Diptera, Phoridae, *Dicranopteron*, new species, new record, China.

The genus *Dicranopteron* Schmitz distributed in Oriental Region is known only from female. All of them were collected from fungus garden of termites and were reported as parasitoids of *Odontotermes* (Isoptera, Termitidae) (Disney, 1990). Up to now, six species were described from Indonesia and Malaysia (Schmitz, 1931; Borgmerer, 1970; Disney, 1990, 1994). No species of the genus was reported in China. In the present paper, *Dicranopteron* Schmitz is reported for the first time to China. A new species, *D. flabellatum* is described and illustrated. The type specimens are deposited in Liaoning Key Laboratory of Urban Integrated Pest Management and Ecological Security, Shenyang University, Shenyang, China.

### *Dicranopteron* Schmitz

*Dicranopteron* Schmitz, 1931. Natuurhistorisch Maadblad, 20: 176. Type species: *D. philotermes* Schmitz.

**Diagnosis.** Frons with weak bristles. Median furrow vestigial or absent. Clypeus large and antennae widely separated. Third antennal segment somewhat pear-shaped with a sub-terminal, long-haired arista. Palpus two-segmented, with the distal segment enlarged and bearing scattered hairs. Thorax with sparsely-haired scutum with two irregular longitudinal rows of five bristles in each. Scutellum broad with an anterior pair of fine bristles and a stronger posterior pair. Mesopleuron without a mesopleural furrow and with scattered hairs. Legs somewhat slender with scattered hairs. Mid tibia without a pair of bristles in basal half. Hind tibia without dorsal hairs palisades, but there may be a row of spaced, differentiated hairs. Wings with a large fork of veins  $R_{2+3}$  and  $R_{4+5}$  and with 3 thin veins. Costa almost reaching the apex of wing. Costal cilia with 3–4 rows. A strong hair is at base of vein Rs and a single, weak, feathered bristle is

on axillary ridge. Abdomen with reduced sclerotization so that only the sides of tergum 1 and two patches on tergum 2 are sclerotized apart from some sclerites in the ovipositor segments. Abdomen membranous with bands of hairs.

**Distribution.** Oriental Region.

### *Dicranopteron flabellatum* sp. nov. (Figs 1–5)

**Female.** Frons brown and with a vestigial median furrow. Frontal bristles weak, which are only a little differentiated from other hairs on frons. Third antennal segment rounded-oval and arista sub-terminal with long-hairs. Palpus dirty yellow and 4 times as long as its widest point. Thorax yellowish brown, anterior scutellars about two-thirds the length of posterior pair. Legs yellow, with scattered strong hairs. There are patches of ctenidia on all venter tip of tibia and venter of first tarsomere. Hind tibia on dorsal sides with two rows of special hairs which are fan-shaped on apex. Hind femur with six or more stronger hairs dorsally in apical third and 10–12 much shorter and finer hairs on posterior face below these bristle-like hairs. Wing Vein Rs forks beyond apex of  $R_1$ . Only three rows of costal cilia. Costa and vein Rs somewhat pale, the rest of the yellowish brown. Microtrichia present on most wing area. Abdomen mostly membranous except the sides of tergum 1 and two patches on tergum 2 are sclerotized. Abdomen with scattered hairs.

**Male.** Unknown.

**Holotype** ♀, China, Taiwan, Pingdong, Hengchun, 7 Nov. 2010, alt. 198 m, YANG Ding. **Paratypes** 3 ♀♀, same data as holotype.

**Etymology.** The specific name refers the characters of hairs in hind tibia.

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Figs 1 – 6. *D. flabellatum* sp. nov. 1. Wing. 2. Hind tibia. 3. Hing leg in posterior view. 4. Fore leg in posterior view. 5. Palpus. 6. Thorax in lateral view. Scale bars = 0.5 mm.

**Remarks.** The new species is similar to *D. brevifurca* Disney in the appearance of wing vein, but differs from the latter in the fan-shaped hairs on dorsal surface of hind tibia and abbreviation of basal palpus segment. The fan-shaped hairs appear also in *D. palmasetorum* Disney, but the wing veins are much different between in the two species.

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## 寄生白蚁的叉蚤蝇属中国首报及一新种记述 (双翅目, 蚤蝇科)

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**摘要** 叉蚤蝇属 *Dicranopteron* Schmitz 种类均为白蚁的拟寄生物, 目前世界记载 6 种。报道了该属首见于我国, 并记述 1 新种扇毛叉蚤蝇 *D. flabellatum* sp. nov.。扇毛叉蚤蝇与 *D. brevifurca* Disney 翅脉相似, 但前者后足胫节背毛具扇状末端, 关键词 双翅目, 蚤蝇科, 叉蚤蝇属, 新种, 新纪录, 中国。中图分类号 Q696.451.8

极易区别。扇状毛也见于 *D. palmasetorum* Disney, 但两者的翅脉截然不同。模式标本存于沈阳大学城市有害生物治理与生态安全辽宁省重点实验室。